

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

DRAFT

Conditional Major, Construction / Operating

Permit: F-07-022

Dawson Manufacturing Company

Morganfield, KY 42437

Date: 3/13/2007

Elahe Houshmand, Reviewer

SOURCE ID: 21-225-00064

SOURCE A.I. #: 39999

ACTIVITY ID: APE20040002

SOURCE DESCRIPTION:

Dawson Manufacturing Co. is located at 3684 US Hwy 60 East in Morganfield, Kentucky. Its primary business activity is applying an adhesive primer and adhesive finish coat to various metal automotive parts in preparation to be rubber coated at another facility. The metal parts are manufactured elsewhere. The preparation of metal parts for rubber coating requires that the facility cleans and applies an adhesive to the metal part in order for the rubber to bond to metal. These coating operations occur on several lines throughout the facility. In addition, the facility has a material handling and storage room, where solvents and adhesives are stored, and where a cleaner that cleans parts is operated. The facility is also equipped with blasting machines. Parts that have been coated but fail quality control specifications are blasted with steel shot grit and then recycled through the coating operations. Each blasting machine is equipped with a baghouse and the steel shot grit is recycled and used over.

COMMENTS:

Dawson Manufacturing Co. has submitted an application for renewal of its current Title V Permit as a Conditional Major and two other modification applications. Currently the source operates under permit # V-99-035 (Revision 4). The requested modifications to the existing permit are as follows:

- A. Application received on March 15, 2006:
 - 1. Remove one of the Wheelabrator tumblast units (Insignificant Activity).
 - 2. Install two (2) Goff tumblast units (Insignificant Activity).

- B. Application received on August 18, 2006:
 - 1. Replace the existing Jensen Catalytic Oxidizer with a MegTec CleanSwitch Regenerative Thermal Oxidizer.
 - 2. Remove MEK from HAP's list pursuant to 40 CFR Part 63.61 as detailed in Federal Register Vol. 70 No. 242.
 - 3. Remove the Dogbone and ID Coater lines.

Type of control and efficiency

Spraying of adhesive is controlled first by particulate filters, then by a regenerative thermal oxidizer. The existing Jensen Catalytic Oxidizer is being replaced with a MegTec CleanSwitch Regenerative Thermal Oxidizer.

VOC destruction efficiency of the regenerative thermal oxidizer shall be tested in accordance with the requirements of SECTION G.4. of the permit and every five years or upon permit renewal using Reference Method 25A specified in Regulation 401 KAR 50:015, Documents incorporated by reference, or other method approved in the Compliance Test Protocol. In addition, an average temperature of the thermal oxidizer will be established during the performance test in order to verify compliance with the emission limitations given in the permit. If the permittee has conducted a Division-witnessed performance test on the thermal oxidizer within the six months preceding issuance of this final permit, the results of this testing shall be accepted in lieu of the testing specified above.

The permittee will determine capture efficiency of all affected facilities within sixty days following the issuance of this final permit.

Prior to conducting the capture and control efficiency tests, the emission calculations have been done by assuming a 90% control for thermal oxidizer and a 90 % capture efficiency for all affected facilities. These values will be revised based on the capture and control test results.

A transfer efficiency of 60 % is assumed for all coating operations.

The Tumblast units have cartridge dust control filters with efficiency of 90%.

The phosphating process has no controls.

All VOC emissions from R & D Spray Booth and the Parts Cleanup/Material Room are vented to the atmosphere uncontrolled.

APPLICABLE REGULATIONS

Regulation 401 KAR 59:010 will apply to emissions of particulates from the Wheelabrators, the adhesive spray, the R & D Spray Booth, and the phosphating process. However, the phosphating process emissions will place that point in the insignificant activities category.

Regulation 401 KAR 59:015, applies to emissions from the natural gas boilers.

NON-APPLICABLE REGULATIONS

The 8,000 gal toluene storage tank is not subject to NSPS Subpart Kb because it is below the exemption level of 40 cubic meters (10,567 gallons).

The boiler (B01) is not subject to NSPS Subpart Dc because it was installed in 1988. NSPS Subpart Dc, Standards of Performance for Small Industrial-institutional Steam Generating Units, applies to units less than or equal to 100 MMBtu/hr but greater than or equal to 10 MMBtu/hr commenced after June 9, 1989. This rule is not applicable to the boiler (B01) because it was installed in 1988.

EMISSION AND OPERATING CAPS DESCRIPTION:

To preclude applicability of Regulation 401 KAR 52:020, Title V Permits, and to preclude applicability of Regulation 401 KAR 59:225, the source-wide emissions of VOC shall not exceed ninety (90) tons during any consecutive twelve (12) month period.

To preclude applicability of Regulation 401 KAR 52:020, Title V permits, and to preclude applicability of Regulation 40 CFR Part 63, Subpart M-MMM-National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, the source-wide emissions (including insignificant activities) of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9) tons during any consecutive twelve (12) month period. The source-wide emissions (including insignificant activities) of combined HAPs shall not exceed twenty-two and one-half (22.5) tons during any consecutive twelve (12) month period.

PERIODIC MONITORING:

Monitoring devices will continuously indicate and record the combustion chamber temperature of the Regenerative Thermal Oxidizer.

Opacity and particulate emissions are assumed to meet limits when particulate controls are in place and functioning. PM controls are monitored by visual inspection once per shift.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.